

The invention is directed to novel cells that are derived from human embryoid bodies. Such embryoid body-derived (EBD) cells are relatively uncommitted or progenitor (*e.g.*, pluripotent) cells. EBD cells, while not immortal, display long-term proliferation in culture with a normal karyotype and can be cryopreserved and cloned. They can be efficiently transfected with retroviruses and lentivirus and genetically manipulated. Although they have a developmentally broad multilineage expression profile, they do not form tumors when injected into severe combined immunodeficiency (SCID) mice. As a result, EBD cells have a variety of uses, for example, in transplantation therapies.